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Annual Statistics for 1999

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Table 1. ALBERTA ELECTRIC ENERGY CAPACITY AND GENERATION BY RESOURCE, 1999

Year / Resource Type	Coal	Natural Gas	Hydro	Wind	Biomass & Waste	Others*	Total
Capacity (MW)	5621.0	2315.3	851.8	21.3	51.0	12.6	8873.0
Capacity (%)	63.3%	26.1%	9.6%	0.2%	0.6%	0.1%	100.0%
Generation (GWh)	40276.7	12126.2	2188.2	64.6	335.5	19.7	55010.9
Generation (%)	73.2%	22.0%	4.0%	0.1%	0.6%	0.0%	100.0%
Capacity Factor (%)	81.8%	59.8%	29.3%	34.6%	75.1%	17.8%	70.8%

* "Others" includes oil, diesel, geothermal, and solar.

Table 2. ALBERTA ELECTRIC ENERGY NET INSTALLED CAPACITY (MCR MW) BY RESOURCE, 1999[1]

Resource Type	Coal	Natural Gas	Hydro	Wind	Biomass & Waste	Others*	Total
Total	5621.0	2315.3	851.8	21.3	51.0	12.6	8873.0

1 Only plants that have reported to the EUB are included.
* "Others" includes oil, diesel, geothermal, and solar.

Table 3. ALBERTA ELECTRIC ENERGY GENERATION (GWh) BY RESOURCE, 1999[1]

Resource Type	Coal	Natural Gas	Hydro	Wind	Biomass & Waste	Others*	Total
Total	40276.7	12126.2	2188.2	64.6	335.5	19.7	55010.9

1 Only plants that have reported to the EUB are included.
* "Others" includes oil, diesel, geothermal, and solar.

Table 4. INTERCHANGE (GWh), 1999

Interconnections	Exports	Imports	Net Interchange
British Columbia	182.2	914.2	,732.0
Saskatchewan	78.8	343.7	264.9
Montana	0.0	2.8	2.8
Total	261.0	1260.7	999.7

Table 5. ALBERTA ELECTRIC ENERGY NET INSTALLED CAPACITY (MCR MW) BY RESOURCE, 1992-1999

Year	Coal	Natural Gas	Hydro	Wind	Biomass & Waste	Others*	Total
1992	5299.0	1931.7	819.7	0.6	-	8.4	8059.4
1993	5318.0	1924.6	819.7	11.5	-	14.6	8088.4
1994	5704.0	1978.3	848.7	21.4	20.7	14.6	8587.7
1995	5704.0	1982.9	848.7	21.4	20.4	12.6	8590.0
1996	5704.0	1985.4	848.7	21.4	35.4	12.6	8607.5
1997	5704.0	1995.9	848.7	21.4	31.4	12.6	8614.0
1998	5621.0	2053.9	848.7	21.3	35.4	11.8	8592.1
1999	5621.0	2315.3	851.8	21.3	51.0	12.6	8873.0

* "Others" includes oil, diesel, geothermal, and solar.

Table 6. ALBERTA ELECTRIC ENERGY GENERATION (GWh) BY RESOURCE AND INTERCHANGE, 1992-1999

Year	Coal	Natural Gas	Hydro	Wind	Biomass & Waste	Others*	Total	Net Interchange		Total
								In	Out	
1992	38,546.7	7,492.4	1,583.1	0.5	-	16.4	47,639.1	-	1,642.7	45,996.4
1993	39,187.2	7,771.6	1,799.4	1.8	-	16.5	48,776.5	-	1,599.7	47,176.8
1994	42,269.8	8,047.4	1,771.3	35.6	16.3	16.1	52,156.5	-	2,108.6	50,047.9
1995	42,460.8	7,219.8	2,006.5	54.3	129.3	14.3	51,885.0	-	958.9	50,926.1
1996	41,220.3	8,228.3	1,973.4	59.1	229.8	13.0	51,723.9	1,883.8	-	53,607.7
1997	43,054.3	8,724.6	1,830.5	62.0	232.2	26.7	53,930.3	1,039.5	-	54,969.8
1998	41,267.7	11,467.7	2,044.6	49.4	279.1	32.1	55,140.6	768.2	-	55,908.8
1999	40,276.7	12,126.2	2,188.2	64.6	335.5	19.7	55,010.9	999.7	-	56,010.6

* "Others" includes oil, diesel, geothermal, and solar.

Table 7. SYSTEM LOAD OF DISTRIBUTION UTILITY OPERATORS AT PEAK LOAD HOUR: 18:00, 13 December 1999

Distribution Utility Operators	Load (MW)
ATCO	1379.0
ENMAX	1229.3
EPCOR	988.2
TRANSALTA UTILITIES	3703.7
CITY OF MEDICINE HAT	107.8
POWER POOL reported a peak demand of 7408 MW*	

* Excludes Medicine Hat and exports; includes transmission losses.

Table 8. DETAILS OF NONCOINCIDENT PEAK LOAD BY DISTRIBUTION UTILITY OPERATORS FOR ALBERTA ELECTRIC SYSTEM, 1999

Distribution Utility Operators	Peak Load (MW)	Time of Occurrence
ATCO	1385.6	18:00 Jan 6/99
ENMAX	1259.0	17:45 Dec 14/99
EPCOR	1012.9	18:00 Dec 14/99
TRANSALTA UTILITIES	4933.0	17:00 Dec 13/99
CITY OF MEDICINE HAT	145.2	17:00 Dec 13/99

Table 9. TOTAL CIRCUIT KILOMETRES OF TRANSMISSION AND DISTRIBUTION LINES BY MAJOR ELECTRIC UTILITY, 1999

Utility Operators	Transmission Lines (over 60 kV)	Distribution Lines (60 kV and below)	Total Lines
ATCO	8,361	51,578	59,939
ENMAX	278	6,605	6,883
EPCOR	188	4,137	4,325
TRANSALTA UTILITIES	11,546	104,424	115,970
City of Lethbridge	35	677	712
City of Medicine Hat	48	587	635
City of Red Deer	0	587	587
Other Towns	0	369	369
Total	20,456	168,964	189,420

Table 10. CIRCUIT KILOMETRES OF TRANSMISSION AND DISTRIBUTION LINES, 1992-1999

Year	Transmission Lines (over 60 kV)	Distribution Lines (60 kV and below)	Total Lines
1992	20,451	210,487	230,938
1993	20,779	188,230	209,009
1994	18,920	185,987	204,907
1995	19,979	211,260	231,239
1996	20,625	230,005	250,630
1997	20,637	199,634	220,271
1998	20,327	194,992	215,319
1999	20,456	168,964	189,420

Table 11. ELECTRIC ENERGY DISTRIBUTION SALES AND NUMBER OF CUSTOMERS, 1999

Utility	Residential		Farm[1]		Commercial[2]		Industrial[3]		Total	
	(GWh)	(No.)	(GWh)	(No.)	(GWh)	(No.)	(GWh)	(No.)	(GWh)	(No.)
ATCO	728.9	105,478	459.7	28,705	1,322.3	39,640	7,003.8	9,560	9,514.7	183,383
ENMAX	2,097.5	298,093	22.9	224	4,499.5	28,674	542.9	2,199	7,162.8	329,190
EPCOR	1,594.5	244,335	-	-	3,743.2	24,464	922.9	1,317	6,260.6	270,116
TRANSALTA UTILITIES	1,830.8	244,215	1,248.6	61,034	2,438.7	40,640	17,581.9	20,259	23,100.0	366,148
City of Lethbridge	159.7	24,947	-	-	201.9	2,529	223.1	36	584.7	27,512
City of Medicine Hat	161.2	21,273	1.3	97	382.9	2,657	119.3	1	664.7	24,028
City of Red Deer	154.6	24,777	-	-	317.9	2,963	32.1	86	504.6	27,826
Other Towns & Villages4	39.6	6,615	0.2	15	46.9	1,048	12.2	29	98.9	7,707
Isolated Plants	19.4	n/a	1.6	n/a	27.3	n/a	62.2	n/a	110.5	n/a
Total	6,786.2	969,733	1,734.3	90,075	12,980.6	142,615	26,500.4	33,487	48,001.5	1,235,910

Note: These data do not include electricity generated on site and used on site.

1 Includes 33,813 Rural Electric Association (REA) customers.

2 Includes street lighting.

3 Includes transportation.

4 Includes Cardston, Fort Macleod, Municipality of Crowsnest Pass, Ponoka.

Table 12. ELECTRIC ENERGY DISTRIBUTION SALES AND NUMBER OF CUSTOMERS, 1992-1999

	Residential		Farm[1]		Commercial[2]		Industrial[3]		Total	
Year	(GWh)	(No.)	(GWh)	(No.)	(GWh)	(No.)	(GWh)	(No.)	(GWh)	(No.)
1992	6,008.3	862,066	1,596.4	94,829	10,931.7	93,616	20,076.3	55,018	38,612.7	1,105,529
1993	6,204.9	854,843	1,562.7	97,770	11,097.0	129,817	20,860.2	17,649	39,724.8	1,100,079
1994	6,284.8	872,722	1,666.1	93,876	11,483.0	123,974	22,530.6	29,751	41,964.5	1,120,323
1995	6,285.6	891,148	1,632.6	94,743	11,497.1	129,116	23,650.2	32,997	43,065.5	1,148,004
1996	6,562.2	922,203	1,794.5	95,403	11,903.7	136,059	24,988.5	31,531	45,248.9	1,185,196
1997	6,520.8	905,124	1,799.1	88,915	12,290.5	141,445	25,918.0	32,226	46,528.4	1,167,710
1998	6,554.8	937,510	1,709.0	77,905	12,881.7	150,244	26,497.5	33,673	47,643.0	1,199,332
1999	6,786.2	969,733	1,734.3	90,075	12,980.6	142,615	26,500.4	33,487	48,001.5	1,235,910

Note: These data do not include electricity generated on site and used on site.

1 Includes Rural Electric Association (REA) customers.

2 Includes street lighting.

3 Includes transportation.